



EPA Region 5 Records Ctr.



279233

PO Box 6820, Traverse City, MI 49696  
1755 Barlow Street, Traverse City, MI 49686  
Phone (231) 933-4041  
Fax (231) 933-4393

Ms. Sy Paulik, EQA  
Michigan Department of Environmental Quality  
120 West Chapin Street  
Cadillac, Michigan 49601

March 6, 2006

RE: Site Update Report – Pond Release Investigation  
Cherry Blossom LLC  
ISE Project No. 02061-59E

Dear Ms. Paulik:

This letter report provides an update for site activities completed by Inland Seas Engineering, Inc. (ISE) at the Cherry Blossom, LLC. parcel located at 10190 Munro Road, Whitewater Township, Grand Traverse County, Michigan. The purpose of this communication is to apprise the Michigan Department of Environmental Quality (MDEQ) of the response activities completed to date since our last update report dated December 12, 2005.

#### **Brief Site History**

On November 8, 2005, a release of impounded wastewater occurred from a Cherry Blossom storage pond. The release reportedly occurred as a result of a failure of the west wall of an earthen berm which served to impound the wastewater following a two (2) day storm event which brought approximately 1.85 inches of rain to the area (per Cherry Capital Airport). ISE conducted an initial assessment of the areas affected as a result of the release on November 22 and 23, 2005.

Four (4) geographic areas of potential environmental concern were identified as a result of ISE's initial assessment and are depicted on Figure 1. These areas have been referred to as:

- Area A – Proximal on-site accumulation area. This area is lower in elevation than the storage pond and is located immediately west of the pond impoundment wall that failed. Wastewater pooled in low areas immediately proximal to the failure zone as it made it's way to a storm water detention basin located to the southwest (Area B).

- Area B – Distal on-site accumulation area. Area B includes storm water detention basins. One of the basins serves as a conduit for released pond water to enter a roadside ditch (via a discharge pipe) located along the east side of Munro Road (Area C).
- Area C – Munro Road ditch right-of-way. A roadside ditch with a gradient to the south served as a channel for wastewater to flow to a low-lying area located southwest of the intersection of Munro and Angell Roads (Area D). Pond water entered this area via a culvert that carries storm water beneath the intersection.
- Area D – Off-site accumulation area. Area D is a low-lying area located southwest of the intersection of Munro and Angell Roads and is the endpoint of the released pond water. Area D is located on a parcel owned by Mr. Calvin Nagy.

The flow path for the released wastewater is shown on Figure 2.

#### **Previous Site Investigation (Pond Release Investigation)**

To determine potential impact of the release throughout the potential areas of concern, chlorides were selected as a screening parameter as it is non-reactive and present in measurable concentrations in pond water.

The four (4) areas of concern (Areas A-D) were evaluated for chloride concentration within surface soils, pooled release areas, and, where appropriate, within the shallow groundwater table. Initial investigative results indicate the following:

- Chloride concentrations in near surface soil samples collected from Area A exceed direct contact criteria. Deeper soil samples (4'-5' bgl) collected from this area did not indicate the presence of chlorides at concentrations above its direct contact criteria.
- Chloride concentrations in water samples collected from the detention basins located in Area B were found to contain significantly lower concentrations of chlorides than identified in pond storage water. Due to the presence of storm water that had accumulated in low-lying areas of Area B where pond water had previously accumulated, no soil samples could be collected to assess soil conditions.
- Chloride concentrations were identified in a soil sample collected along the roadside ditch (Area C) and in soil samples collected from Area D at concentrations above its direct contact criteria.

Based on the initial findings, ISE completed several additional investigation activities and response measures both on and off site. It should be noted that although much work has been completed in Areas A-D, Cherry Blossom has also been focusing on the removal and proper disposal of wastewater from the on-site storage pond.

### **Additional Investigation/Response Measures**

The additional investigation and response measures recently completed at this site have been segregated by Area.

#### Area A Investigative and Response Measures

Due to the close proximity and lower elevation of this area relative to the storage pond, no response measures (i.e. use of heavy equipment) that could jeopardize the integrity of the pond impoundment area have been completed. In order to prevent the exacerbation of the existing contamination in portions of Area A where pond water had accumulated, a 20-mil PVC cover was placed over these sections to prevent storm water from infiltrating site soils. Area A will be further evaluated following the removal of additional wastewater from the pond.

#### Area B Investigative and Response Measures

The discharge pipe leading from the northern most storm water catch basin in Area B to the ditch located along the east side of Munro Road was plugged by Cherry Blossom and sealed with bentonite by ISE personnel in December 2005. This pipe was previously utilized for the transport of storm water from an on-site retention basin to the ditch during significant storm events. No other work has been completed in Area B.

#### Area C Investigative and Response Measures

Area C comprises the portion of the roadside ditch located in the Grand Traverse County Road right-of-way (R.O.W.) along the east side of Munro Road (between the discharge pipe from Area B and the intersection of Munro and Angell Roads. Initial investigative activities completed in this Area included the collection of a soil sample from three (3) feet below ground level (bgl) at location SB-130. The analytical laboratory results indicated the presence of chlorides in this sample at a concentration of 584 mg/Kg, which is above its direct contact value of 500 mg/Kg. ISE also completed several hand auger borings during this investigation to determine the depth of groundwater in Area C. Groundwater was not encountered in any of the borings to the maximum depth augered of 13 feet bgl.

Prior to completing additional work in Area C, ISE's survey department established control for future measurement purposes by placing a series of stakes along the roadside ditch. In addition, a R.O.W. permit was obtained from the Grand Traverse County Road Commission prior to completing the site work.

ISE completed seven (7) soil borings (SB-303 – SB-309), installed two (2) shallow monitor wells (MW-4s and MW-5s) and collected one groundwater grab sample (SB-305) using direct push methods in January 2006. Figure 2 depicts the soil boring/well locations and boring logs are contained in Attachment A. Soil samples were collected from each boring location at multiple depths and submitted to SPL for analysis of chlorides. The analytical laboratory results did not indicate the presence of chlorides in any of the soil samples submitted for laboratory analysis at concentrations above its respective direct contact value. Table 1 summarizes the analytical laboratory results.

In order to verify the previous soil sample result (584 mg/Kg) of the sample collected at three (3) feet bgl at SB-130, ISE completed SB-306 at this location. Soil samples collected from 0-1' bgl, 2'-3' bgl and 6'-7' bgl did not indicate the presence of chlorides at concentrations above their respective direct contact values. Based on this information, the sample result for the single soil sample previously collected from SB-130 does not appear representative of actual site conditions (see Table 1).

Groundwater samples collected from MW-4s and MW-5s did not indicate the presence of chlorides in the groundwater sample collected at concentrations above its respective direct contact criteria. The groundwater grab sample from SB-305 was collected at a depth of 14'-16' bgl and indicated the presence of chlorides at a concentration of 303 mg/L, which is slightly above its direct contact criteria of 250 mg/L. Based on this sample result, ISE will install a permanent monitor well at this location to further evaluate these conditions. Groundwater sampling results for Areas C and D are contained in Table 2.

#### Area D Investigative and Response Measures

Initial investigative activities completed in Area D included the collection of 16 soil samples at depths ranging from 12" to 18" bgl. The soil sample results indicated the presence of chlorides at concentrations ranging from 30 mg/Kg (SB-102) to 2,140 mg/Kg (TMW-1). Groundwater samples collected from temporary monitor wells set at a depth of approximately two (2) feet bgl indicated the presence of chlorides at concentrations below their respective residential Drinking Water Criterion. Table 2 summarizes the analytical laboratory results.

Based on ISE's initial findings, it appears the pond water was distributed across Area D along a two-track that extended from the northern portion of Area D (near the discharge pipe adjacent to Angell Road) southward to a point approximately 250 feet south of the road where an increase in surface elevation was evident. It should be noted that Area D is bounded to the west by a railroad grade and to the east by a parking lot, both of which have a higher elevation than the two-track in which the pond water is believed to have followed.

Based on the above information, ISE established a sampling grid in accordance with the MDEQ Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria in order to help delineate the extent of soil impaction and aid in the collection of pre-excavation soil verification samples for excavation purposes. Figure 3 depicts the layout of the grid and sample collection points. ISE used a 20 foot grid interval in establishing the grid. ISE's survey team laid out the sampling grid with stakes and several additional control points along the railroad grade and parking lot for future measurement needs. The survey team also surveyed in soil sampling locations and used this data to assemble a topographic map of Area D. Soil sample locations are shown on Figure 3.

ISE collected a total of 45 soil samples from representative cells at a depth of 18-inches bgl on December 15, 2005. The soil samples were submitted to SPL, Inc. of Traverse City, Michigan for chlorides analysis. The analytical laboratory results did not indicate the presence of chlorides in any of the soil samples submitted for laboratory analysis at a level above its respective direct contact criteria of 500 ppm. Table 3 summarizes the analytical laboratory results.

Based on the analytical laboratory results, depth to groundwater (approximately 20"-24" bgl) and the previous groundwater sample results, ISE personnel excavated approximately 425 cubic yards of impacted soil from Area D in December 2005. The excavation was completed to a minimum depth of at least 18-inches bgl, the depth at which the pre-excavation soil samples were collected. The excavated soils have been staged on-site on a 20-mil PVC liner and covered with same. The excavation was backfilled with clean sand fill and topsoil in accordance with the wetlands permit issued by the MDEQ. The fill material was excavated from a nearby parcel owned by Cherry Blossom since these soils contained like characteristics of the material removed from the wetland. Six (6) soil samples were collected from the fill material prior to being excavated to ensure elevated chloride concentrations were not present. The sample results did not indicate the presence of chlorides in the sample collected at elevated concentrations and are summarized in Table 3. This area will be seeded during spring 2006 with an appropriate vegetative cover. ISE is currently working with Cherry Blossom regarding disposal options for the excavated soil.

Prior to excavation activities, ISE, on behalf of Mr. Cal Nagy (owner of the parcel in which Area D is located), obtained appropriate permits from the MDEQ (wetland permit) and the Grand Traverse County Drain Commissioner's Office (Soil Erosion and Sedimentation Control permit).

Following excavation activities, ISE installed three (3) monitor wells (MW-1s, MW-1m and MW-1d) on the Nagy parcel and two (2) shallow monitor wells (MW-2 and MW-6) on the adjoining property to the west (Whitewater Township parcel – downgradient of the area of impaction). In addition, one deep groundwater grab sample (MW-6 – 14'-16' bgl) was collected from the adjoining property to the west. Figure 3 depicts the grab groundwater sample and monitor well locations. MW-1s and MW-2 were completed with the aid of a hand auger and MW-1m, MW-1d, MW-6 and the groundwater grab sample were completed with direct push sampling equipment. Well logs depicting soil lithology, total well depth, etc. are contained as Attachment A. It should be noted that MW-1s, MW-1m and MW-1d were completed at the same location where soil sample TMW-1 was collected. The soil sample previously collected from TMW-1 produced the highest concentration of chlorides identified within Area D.

Groundwater samples were collected from each monitor well location using low-flow sampling equipment in January 2006 and submitted to SPL for chlorides analysis. The analytical laboratory results did not indicate the presence of chlorides in any of groundwater samples submitted for laboratory analysis at concentrations above its respective MDEQ Residential Drinking Water Criteria. Table 2 provides a summary of the analytical laboratory results.

Based on the excavation activities completed, pre-excavation soil sample results and groundwater sample results, ISE believes that no additional work in Area D is necessary.

#### Additional Response Measures

In addition to the work recently completed in Areas A-D, ISE, at the request of Cherry Blossom, scheduled the collection of drinking water samples from residential potable wells in the vicinity of the site. Figure 1 depicts the locations of the nearby potable wells.

The drinking water samples were collected by SOS Analytical, Inc. (SOS) in December 2005 and analyzed at their in-house laboratory for chlorides, arsenic, iron, manganese, nitrates, sodium sulfate, cyanide, fluoride and hardness. The analytical laboratory results did not identify elevated concentrations of the aforementioned parameters in any of the samples collected, with the exception of drinking water samples collected from the Jorgensen well and Bustance well. Table 4 summarizes the samples results collected from nearby potable wells.

The drinking water sample collected from the Jorgensen well indicated the presence of iron (9.19 mg/L) at a concentration above its respective residential drinking water value. Based on this result, SOS resampled the well and identified the presence of iron (0.06 mg/L) at a concentration well below its residential drinking water criteria. The first sample result is believed to be attributed to a laboratory anomaly and/or the type of interior piping present within the dwelling.

The sample collected from the Bustance well indicated the presence of nitrates (15.20 mg/L) above its residential drinking water criteria. Upon receipt of the analytical laboratory results, ISE contacted Mrs. Bustance and learned she is aware of the nitrate contamination and installed a reverse osmosis system in order to reduce nitrate levels to safe drinking water standards. The water sample collected by SOS personnel was taken prior to the treatment system.

It should be noted that both the Jorgensen and Bustance residences are located upgradient of the Cherry Blossom parcel and the associated storage ponds and brine pits and are likely situated within the adjoining Elk Lake Watershed.

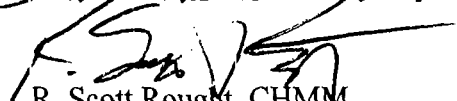
#### **Future Response Measures**

Future response measures to be completed at this site have been included in a Remedial Investigation Work Plan (RIWP) that was prepared and submitted to the MDEQ on January 9, 2006. This plan addresses all known release areas and includes a scope of work to further evaluate the fate, transport and potential receptors of hazardous substances released at the site and plans for long-term monitoring of groundwater. Additional work will also be completed in the vicinity of SB-305 (Munro Road Ditch) to further evaluate groundwater chloride concentrations at this location.

If you have any questions regarding this status report, please do not hesitate to contact me at (231) 933-4041.

Sincerely,

**INLAND SEAS ENGINEERING, INC.**



R. Scott Rought, CHMM  
Project Manager

cc: Michael Stifler, PE - MDEQ - Cadillac  
Chris Hubbell - Cherry Blossom LLC  
Joe Quandt - Zimmerman, Kuhn, Darling, Boyd, Taylor and Quandt

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**INLAND SEAS ENGINEERING, INC.**

## **FIGURES**









## TABLES

**Table 1**  
**Soil Analytical Results - Munro Ditch**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID	Direct Contact Criteria & RBSLs	Drinking Water Protection Criteria & RBSLs	MS-4s			SB-303		SB-304			SB-305			
Sample Depth			0-1'	2-3'	6-7'	0-1'	2-3'	0-1'	2-3'	6-7'	0-1'	1-2'	2-3'	6-7'
Date Collected			1/27/06			1/27/06		1/27/06			1/27/06			
Date Analyzed			2/8/06			2/8/06		2/8/06			2/8/06			
EPA Method No.			325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2
Chloride (mg/kg)	500 (F)	5000	220	34	37	38	20	260	91	99	52	22	26	74
Soil Moisture (%)			14.6%	5.2%	4.6%	6.5%	5.4%	14.0%	10.8%	9.3%	14.9%	5.3%	7.0%	5.9%

NOTES:

NA: Not Analyzed

(F): Criterion is based on adverse impacts to plant life and  
phytotoxicity

**SB-130** Results analyzed by SOS Analytical

**SB-303** Results analyzed by SPL

**Table 1**  
**Soil Analytical Results - Munro Ditch**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID	Direct Contact Criteria & RBSLs	Drinking Water Protection Criteria & RBSLs	SB-306			SB-130	MS-5s				SB-307		
Sample Depth			0-1'	2-3'	6-7'	3'	0-1'	1-2'	2-3'	3-4'	0-1'	2-3'	6-7'
Date Collected			1/27/06			12/5/05	1/27/06				1/26/06		
Date Analyzed			2/8/06			12/07/05	2/8/06				2/8/06		
EPA Method No.			325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2
Chloride (mg/kg)	500 (F)	5000	78	20	26	584	150	56	43	38	40	170	130
Soil Moisture (%)			10.6%	4.9%	3.4%	9.4%	21.7%	8.6%	12.2%	9.9%	23.0%	13.8%	16.9%

**NOTES:**

NA: Not Analyzed

(F): Criterion is based on adverse impacts to plant life and  
phytotoxicity

**SB-130** Results analyzed by SOS Analytical

**SB-303** Results analyzed by SPL

**Table 1**  
**Soil Analytical Results - Munro Ditch**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID	Direct Contact Criteria & RBSLs	Drinking Water Protection Criteria & RBSLs	SB-308		SB-309			Averages along ditch			Maximum Observed		
Sample Depth			0-1'	2-3'	0-1'	2-3'	6-7'	0-1' (n=9)	2-3' (n=9)	6-7' (n=6)	0-1'	2-3'	6-7'
Date Collected			1/26/06		1/26/06			1/26-27/2006			1/26-27/2006		
Date Analyzed			2/8/06		2/8/06			2/8/06			2/8/06		
EPA Method No.			325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2	325.2
Chloride (mg/kg)	500 (F)	5000	91	78	66	250	80	111	81	74	260	250	130
Soil Moisture (%)			12.0%	12.0%	14.7%	11.6%	11.6%	14.7%	9.2%	8.6%	21.7%	13.8%	16.9%

**NOTES:**

NA: Not Analyzed

(F): Criterion is based on adverse impacts to plant life and phytotoxicity

SB-130 Results analyzed by SOS Analytical

SB-303 Results analyzed by SPL

**Table 2**  
**Groundwater Analytical Results -**  
**Munro Ditch and Wetland Area**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID	Residential & Commercial I Drinking Water Criteria and RBSLs	<i>TMW-1</i>	TMW-1	<i>TMW-2</i>	TMW-2	TMW-3	MW-1s	MW-1m	MW-1d
Screen Interval		0-4'	0-4'	0-5'	0-5'	0-4'	0-4'	11-16'	20-25'
Date Collected		12/05/05	12/16/05	12/05/05	12/16/05	12/16/05	01/26/06	01/26/06	01/26/06
Date Analyzed		12/07/05	12/19/05	12/07/05	12/19/05	12/19/05	02/01/06	02/01/06	02/01/06
Collection Method		Peristaltic Pump	Low Flow	Peristaltic Pump	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Dissolved Oxygen (mg/L)		NA	0.38	NA	0.36	0.20	NA	NA	NA
Temperature (deg C)		NA	2.5	NA	3.7	3.0	NA	NA	NA
pH		NA	7.95	NA	8.05	7.97	NA	NA	NA
Conductivity (mS/cm)		NA	1.69	NA	1.00	0.828	NA	NA	NA
Chloride (mg/L, PPM)	250	184	52	47	47	48	21	14	13

**NOTES:**

NA: Not Analyzed

(E) -Criterion is the aesthetic  
drinking water value

DWC - Residential & Commercial I Drinking Water Criteria & RBSLs

*TMW-1* - Samples analyzed by SOS Analytical

TMW-1 - Samples analyzed by SPL

**Table 2**  
**Groundwater Analytical Results -**  
**Munro Ditch and Wetland Area**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
**ISE Project #02061**

Sample ID	Residential & Commercial I Drinking Water Criteria and RBSLs	MW-2	MW-4s	MW-5s	MW-6	MW-6	SB-305
Screen Interval		0-4.25'	7-12'	10.5-15.5'	1-6'	14-16'	14-16'
Date Collected		01/26/06	01/27/06	01/27/06	01/26/06	01/26/06	01/27/06
Date Analyzed		02/01/06	02/01/06	02/01/06	02/01/06	02/01/06	02/01/06
Collection Method		Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	GRAB-Peristaltic Pump	GRAB-Peristaltic Pump
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Dissolved Oxygen (mg/L)		NA	NA	NA	NA	NA	NA
Temperature (deg's C)		NA	NA	NA	NA	NA	NA
pH		NA	NA	NA	NA	NA	NA
Conductivity (mS/cm)		NA	NA	NA	NA	NA	NA
Chloride (mg/L, PPM)	250	123	186	161	161	39	303

NOTES:

NA: Not Analyzed

(E) -Criterion is the aesthetic drinking water value

DWC - Residential & Commercial I Drinking Water Criteria

TMW-1 - Samples analyzed by SOS Analytical

TMW-1 - Samples analyzed by SPL



**Table 3**  
**Excavation Verification -**  
**Soil Analytical Results**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID		SB-200	SB-201	SB-202	SB-203	SB-204	SB-205	SB-206	SB-207
Sample Location Sample Depth	Direct Contact Criteria & RBSLs	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected		12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, FPM)	500 (F)	34	95	78	13	22	<11	28	<16
Soil Moisture (%)		15.8	34.8	15.2	18.2	26.8	8.9	29.1	36.1

NOTES:

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Results analyzed by SPL Analytical

**Table 3**  
**Excavation Verification -**  
**Soil Analytical Results**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID		SB-208	SB-209	SB-210	SB-211	SB-212	SB-213	SB-214	SB-215
Sample Location Sample Depth	Direct Contact Criteria & RBSLs	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected		12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, PPM)	500 (F)	<12	<11	26	23	16	<15	98	16
Soil Moisture (%)		15.1	10.6	27.2	25.0	16.9	34.9	32.4	29.1

NOTES:

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse  
impacts to plant life and  
phytotoxicity

Results analyzed by SPL Analytical

**Table 3**  
**Excavation Verification -**  
**Soil Analytical Results**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID		SB-216	SB-217	SB-218	SB-219	SB-220	SB-221	SB-222	SB-223
Sample Location Sample Depth	Direct Contact Criteria & RBSLs	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected		12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, PPM)	500 (F)	32	<11	30	<13	<12	85	24	16
Soil Moisture (%)		31.0	9.7	13.3	25.5	16.9	55.2	14.1	13.2

NOTES:

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Results analyzed by SPL Analytical

**Table 3**  
**Excavation Verification -**  
**Soil Analytical Results**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
**ISE Project #02061**

Sample ID		SB-224	SB-225	SB-226	SB-227	SB-228	SB-229	SB-230
Sample Location	Direct Contact Criteria & RBSLs	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Sample Depth								
Date Collected		12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, 1'PM)	500 (F)	75	20	<13	18	120	<16	42
Soil Moisture (%)		25.7	30.9	22.1	6.5	33.3	37.9	33.1

NOTES:

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse  
impacts to plant life and  
phytotoxicity

Results analyzed by SPL Analytical

**Table 3**  
**Excavation Verification -**  
**Soil Analytical Results**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID	Direct Contact Criteria & RBSLs	SB-231	SB-232	SB-233	SB-234	SB-235	SB-236	SB-237
Sample Location		1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Sample Depth		1.5'	1.5'	1.5'	1.5'	1.5'	1.5'	1.5'
Date Collected		12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, PPM)	500 (F)	30	<13	<11	<12	12	34	24
Soil Moisture (%)		10.1	24.8	10.6	19.5	14.9	25.6	29.4

NOTES:

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Results analyzed by SPI. Analytical

**Table 3**  
**Excavation Verification -**  
**Soil Analytical Results**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID		SB-238	SB-239	SB-240	SB-241	SB-242	SB-243	SB-244
Sample Location Sample Depth	Direct Contact Criteria & RBSLs	1.5'	1.5'	10"	18"	18"	9"	18"
Date Collected		12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05	12/15/05
Date Analyzed		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, PPM)	500 (F)	11	41	22	23	79	<15	12
Soil Moisture (%)		11.5	19.5	28.7	11.3	16.7	34.2	14.8

NOTES:

NA: Not Applicable

All results in mg/l:g (Dry weight)

(F): Criterion is based on adverse  
impacts to plant life and  
phytotoxicity

Results analyzed by S/L Analytical

**Table 3**  
**Excavation Verification -**  
**Soil Analytical Results**  
**Pond Release Investigation**  
**Cherry Blossom LLC**  
ISE Project #02061

Sample ID	Direct Contact Criteria & RBSLs	SB-250	SB-251	SB-252	SB-253	SB-254	SB-255
Sample Location Sample Depth		Sand Fill Verification 1'	Sand Fill Verification 1'	Sand Fill Verification 1'	Topsoil Fill Verification 0.5'	Topsoil Fill Verification 0.5'	Topsoil Fill Verification 0.5'
Date Collected		12/16/05	12/16/05	12/16/05	12/16/05	12/16/05	12/16/05
Date Analyzed		12/20/05	12/20/05	12/20/05	12/20/05	12/20/05	12/20/05
Collection Method		Grab	Grab	Grab	Grab	Grab	Grab
Analytical Method No.		EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2	EPA 325.2
Chloride (mg/kg, PPM)	500 (F)	<10	13	22	14	24	15
Soil Moisture (%)		3.7	3.3	5.2	9.7	12.9	11.0

**NOTES:**

NA: Not Applicable

All results in mg/kg (Dry weight)

(F): Criterion is based on adverse

impacts to plant life and

phytotoxicity

Results analyzed by SPL Analytical

**Table 4**  
**Area Pumping Well Sample Results**  
**Cherry Blossom, LLC**  
ISE Project #02061-59E

Sample ID	Analytical Method No.	Residential & Commercial I Drinking Water Criteria and RBSLs	<i>Richard Monroe</i>	<i>Ken Hogarth</i>	<i>C. Boals</i>	<i>C. Boals (Rental)</i>	<i>Edward Kinnee</i>	<i>Randall Jorgensen</i>		<i>Migrant Camp</i>	<i>Cal Nagy</i>	<i>William Bustance</i>	<i>North Building</i>
Sample Location			<i>Kitchen Sink</i>	<i>Kitchen Sink</i>	<i>Outside Well</i>	<i>Outside Well</i>	<i>Kitchen Sink</i>	<i>Pressure Tank</i>	<i>Outside Spigot</i>	<i>Outside Well</i>	<i>Pressure Tank</i>	<i>Pressure Tank</i>	<i>Proposed Well</i>
Sampler (Affiliation)			<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>J. Nolan (SOS)</i>	<i>B. Smith (Cherry Blossom)</i>
Date Collected			12/21/2005	12/21/2005	12/20/2005	12/21/2005	12/21/2005	12/22/2005	1/6/2006	12/21/2005	12/21/2005	12/21/2005	10/13/2005
Date Analyzed			12/29/2005	12/29/2005	12/29/2005	12/29/2005	12/29/2005	12/29/2005	1/9/2006	12/29/2005	12/29/2005	12/29/2005	10/14/2005
Time Sampled			4:45pm	5:15pm	2:36pm	2:41pm	2:45pm	5:00pm	1:45 pm	3:37pm	2:30pm	3:22pm	
Arsenic	EPA 200.9	0.01 (A)	<0.002	<0.002	<0.003	<0.003	<0.003	<0.002	NM	<0.003	<0.003	<0.003	NM
Chloride	EPA 300.0	250	2.53	6.02	2.93	14.80	96.40	18.60	NM	5.57	30.90	94.60	8.90
Conductivity	SM2510-B	NA	334	413	342	390	967	440	NM	409	423	721	NM
Iron	SM3111 Fe-B FLAA	.3 (E - 2.0)	1.23	<0.05	0.66	0.89	0.22	9.19	0.06	<0.05	0.16	0.22	0.57
Manganese	SM3111 Mn-B FLAA	.05 (E - 0.86)	<0.02	<0.02	0.07	0.15	0.41	0.23	NM	<0.02	<0.02	<0.02	NM
Nitrogen, Ammonia	EPA 350.1	10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NM	<0.05	<0.05	<0.05	NM
Nitrogen, Nitrate	EPA 300.0	10	<0.1	6.28	<0.15	<0.15	3.58	6.83	NM	1.82	6.03	15.20	<0.1
Nitrogen, Nitrite	EPA 300.0	1	<0.05	<0.05	<0.005	<0.005	0.078	<0.05	NM	<0.005	0.011	<0.005	<0.05
pH (s.u.)	EPA 150.1	6.5-8.5	NM	NM	NM	NM	NM	NM	8.4	NM	NM	NM	NM
Sodium	SM3111B	125	1.95	1.45	1.62	4.81	50.30	9.94	NM	1.46	8.04	39.70	9.14
Sulfate	EPA 300.0	250	42.10	26.90	37.10	30.90	57.60	31.40	NM	23.10	19.70	33.70	18.40
Cyanide - Total	SM4500 CN-C/E	0.2 (A)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	<0.010
Fluoride	EPA 300.0	2.0 (E)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	<0.2
Hardness (Calc)	SM2340-B	NA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	165.00

**NOTES:**

All results are listed in mg/L

NM - Not Measured


NA - Not Analyzed

Health Based Criteria noted in parantheses

**INLAND SEAS ENGINEERING, INC.**



**ATTACHMENT A:**  
**SOIL BORING AND MONITOR WELL LOGS**

 <b>INLAND SEAS ENGINEERING</b> Traverse City 231.933.4041 Flushing 810.487.0555		BORING/WELL: <b>MW-1s</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690			
		10190 Munro Road Whitewater Township Grand Traverse County, Michigan					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL			
—	GRADE Top soil						
—	SAND, few silt, few clay, dark brown, moist						
—	SAND, medium, trace silt, brown, moist						
—	SAND, medium to fine, tan to black, wet	100	HA				
—	CLAY, some silt, gray, moist to wet (~4")						
5	End of boring = 4.5 feet - Hammer Driven Point Refused						
10							
15							
20							
25							
30							
35							
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Inland Seas Engineering		RSR		Hand Auger		1/26/2006	
Logged By:		Logging Method:		Development Method:		Project #:	
RSR		ASTM D 2488-90		Peristaltic Pump		02 061	
Casing Type:		Screen Type & Length:		Ground Elevation: Top of Casing Elevation:		Sheet Number:	
2" PVC		2" - 5' / 10 Slot		NA NA		1 of 1	



Traverse City 231.933.4041  
Flushing 810.487.0555

**BORING/WELL:****SB-301 / MW-1m**


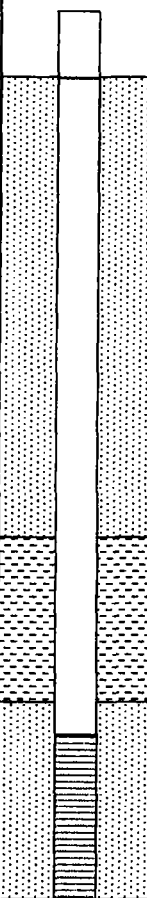
**10190 Munro Road  
Whitewater Township  
Grand Traverse County, Michigan**

**PREPARED FOR:**

**Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690**

DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	DEPTH
	GRADE Topsoil				
	SAND, few silt, few clay, dark brown, moist				
▽	SAND, medium, trace silt, brown, moist		MS		
	SAND, medium to fine, tan to black, wet				
5	CLAY, some silt, gray, moist to wet (~4")		MS		5
10	SAND, fine, brown, wet		MS		10
15			MS		15
	End of boring = 16 feet.				
20					20
25					25
30					30
35					35

Drilling Contractor: <b>Environmental Investigations</b>	Driller: <b>Bill</b>	Drilling Method: <b>Geo Probe</b>	Date Drilled: <b>1/26/2006</b>
Logged By: <b>Tim Gates</b>	Logging Method: <b>ASTM D 2488-90</b>	Development Method: <b>Peristaltic Pump</b>	Project #: <b>02 061</b>
Casing Type: <b>1" Pvc</b>	Screen Type & Length: <b>1" - 5' / 10 Slot</b>	Ground Elevation: <b>NA</b>	Top of Casing Elevation: <b>NA</b>
		Sheet Number: <b>1 of 1</b>	

 <b>INLAND SEAS ENGINEERING</b> Traverse City 231.933.4041 Flushing 810.487.0555		<b>BORING/WELL:</b> <b>SB-301 / MW-1d</b>		<b>PREPARED FOR:</b>  <b>Cherry Blossom LLC</b> <b>10190 Munro Road</b> <b>Williamsburg, Michigan 49690</b>			
		<b>10190 Munro Road</b> <b>Whitewater Township</b> <b>Grand Traverse County, Michigan</b>					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	Well Diagram		DEPTH
	GRADE Topsoil						
	SAND, few silt, few clay, dark brown, moist						
	SAND, medium, trace silt, brown, moist		MS				
	SAND, medium to fine, tan to black, wet						
5	CLAY, some silt, gray, moist to wet (~4")		MS				
10	SAND, fine, brown, wet		MS				
15			MS				
20			MS				
25	End of boring = 25 feet.		MS				
30							
35							
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Environmental Investigations		Bill		Geo Probe		1/26/2006	
Logged By:		Logging Method:		Development Method:		Project #:	
Tim Gates		ASTM D 2488-90		Peristaltic Pump		02 061	
Casing Type:		Screen Type & Length:		Ground Elevation:		Top of Casing Elevation:	
1" Pvc		1" - 5' / 10 Slot		NA		NA	
						Sheet Number:	
						1 of 1	



Traverse City 231.933.4041  
Flushing 810.487.0555

BORING/WELL:

**MW-2**

**10190 Munro Road  
Whitewater Township  
Grand Traverse County, Michigan**

PREPARED FOR:

**Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690**

DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		DEPTH
	GRADE Top soil					
	ORGANIC SILT, trace sand, black, moist					
	SAND, medium, tan, moist					
5	SAND, fine to medium, tan, moist	100	HA			
	CLAY, some silt, gray, moist to wet					
	End of boring = 4.25 feet - Hammer Driven Point Refused on 3 attempts					
10						
15						
20						
25						
30						
35						

Drilling Contractor: <b>Inland Seas Engineering</b>	Driller: <b>RSR</b>	Drilling Method: <b>Hand Auger</b>	Date Drilled: <b>1/26/2006</b>
Logged By: <b>RSR</b>	Logging Method: <b>ASTM D 2488-90</b>	Development Method: <b>Peristaltic Pump</b>	Project #: <b>02 061</b>
Casing Type: <b>2" PVC</b>	Screen Type & Length: <b>2" - 5' / 10 Slot</b>	Ground Elevation: <b>NA</b>	Top of Casing Elevation: <b>NA</b>
Sheet Number: <b>1 of 1</b>			



Traverse City 231.933.4041  
Flushing 810.487.0555

BORING/WELL:

MW-3

10190 Munro Road  
Whitewater Township  
Grand Traverse County, Michigan

PREPARED FOR:

Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690

DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	Pocket Penetrometer	TYPE & INTERVAL	DEPTH
	GRADE Field Grass				
	SAND, coarse, trace gravel, fine, brown, moist	MS			
5	CLAY, hard, brown, moist	4.5 max			4'
5	SAND, Medium, brown, wet	MS			5
8	CLAY, stiff, brown, moist	1.5			8'
10	SAND, medium, brown, wet	MS			10
12	CLAY, very stiff, brown, moist	3.25			12'
15	SAND, medium, brown, wet	MS			15
18	CLAY, very stiff, brown, moist	3			18'
20	CLAY, hard, brown, moist	4.5 max			20
22	SAND, medium, grey, wet (4" seam)	MS			22'
22	CLAY, hard, grey, moist	4.5 max			22'
25	SAND, medium, grey, wet	KS SP			25
	End of boring = 26 feet.				
30					30
35					35

Drilling Contractor: <b>Environmental Investigations</b>	Driller: <b>Bill</b>	Drilling Method: <b>Geo Probe</b>	Date Drilled: <b>1/26/2006</b>
Logged By: <b>Tim Gates</b>	Logging Method: <b>ASTM D 2488-90</b>	Development Method: <b>Peristaltic Pump</b>	Project #: <b>02 061</b>
Casing Type <b>1" Pvc</b>	Screen Type & Length: <b>1" - 5' / 10 Slot</b>	Ground Elevation: <b>NA</b>	Top of Casing Elevation: <b>NA</b>
			Sheet Number: <b>1 of 1</b>



Traverse City 231.933.4041  
Flushing 810.487.0555

BORING/WELL:

SB-302 / MW-6


10190 Munro Road  
Whitewater Township  
Grand Traverse County, Michigan

PREPARED FOR:

Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690

DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	DEPTH
	GRADE Field Grass				
	SAND, fine, some organics, black, moist		MS		
5	SAND, fine, trace silt, grey, moist		MS		5
10	SAND, fine to medium, brown, wet		MS		10
15			MS SP		15
	End of boring = 16 feet.				
20					20
25					25
30					30
35					35

Drilling Contractor:	Driller:	Drilling Method:	Date Drilled:
Environmental Investigations	Bill	Geoprobe	1/26/2006
Logged By:	Logging Method:	Development Method:	Project #:
Tim Gates	ASTM D 2488-90	Peristaltic Pump	02 061
Casing Type:	Screen Type & Length:	Ground Elevation:	Top of Casing Elevation:
1" Pvc	1" - 5' / 10 Slot	NA	NA
			Sheet Number:
			1 of 1

 <b>INLAND SEAS ENGINEERING</b> Traverse City 231.933.4041 Flushing 810.487.0555		<b>BORING/WELL:</b> <b>MW-4s</b>  <b>10190 Munro Road</b> <b>Whitewater Township</b> <b>Grand Traverse County, Michigan</b>		<b>PREPARED FOR:</b>  <b>Cherry Blossom LLC</b> <b>10190 Munro Road</b> <b>Williamsburg, Michigan 49690</b>			
DEPTH	SOIL DESCRIPTION AND COMMENTS	Sampling Method/ Recovery	Pocket Penetrometer	TYPE & INTERVAL	Well Diagram	DEPTH	
---						---	
---						---	
---						---	
---						---	
---						---	
---						---	
---						---	
---						---	
---						---	
5	<b>GRADE</b> Field Grass SAND, fine to medium, trace cobble to gravel, trace coarse sand, trace silt, trace organics, dark brown to gray, moist	MS (90%)				5	
---	SAND, fine to medium, trace coarse sand, trace silt, trace organics, light brown, moist to dry	MS (90%)				---	
---						---	
---						---	
10	SAND, fine, few silt, trace medium sand, tan, moist SAND, medium, few fine sand, trace coarse sand, brown, moist to wet	MS (90%)				10	
---	SAND, medium, little fine sand, trace gravel, trace silt, trace clay, gray to dark gray, wet					---	
15	SAND, fine to medium, few silt, trace coarse sand, trace clay, dark brown, moist to wet	KS (90%)				---	
---	CLAY, little silt, few fine sand, trace coarse sand, dark gray, very stiff to hard, moist	KS (90%)	2.2 @ 16.5			---	
---	End of boring = 18 feet.		4.5 @ 17.5			---	
20						20	
---						---	
25						25	
---						---	
30						30	
---						---	
35						35	
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Environmental Investigations		Bill		Geo Probe		1/27/2006	
Logged By:		Logging Method:		Development Method:		Project #:	
LCM		ASTM D 2488-90		Peristaltic Pump		02 061	
Casing Type:		Screen Type & Length:		Ground Elevation:		Sheet Number:	
1" Pvc		1" - 5' / 10 Slot		NA		1 of 1	





Traverse City 231.933.4041  
Flushing 810.487.0555

BORING/WELL:

MW-5s


10190 Munro Road  
Whitewater Township  
Grand Traverse County, Michigan


PREPARED FOR:


Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690


DEPTH	SOIL DESCRIPTION AND COMMENTS	Sampling Method/ Recovery	Pocket Penetrometer	TYPE & INTERVAL	Well Diagram	DEPTH
	GRADE Field Grass					
	SAND, fine to medium, trace coarse sand, trace silt, trace clay, trace organics, black to gray, moist					
	SAND, few silt, trace clay, brown, moist	MS (90%)				
	CLAY, some fine sand, little silt, dark brown, moist					
5	SAND, fine to medium, few silt, trace gravel, trace coarse sand, trace clay, dark brown, moist	MS (90%)				5
	SAND, fine to medium, trace gravel, trace silt, brown, moist, Dark brown beds <.5"	MS (90%)				
	SAND, some clay, few silt, trace gravel, dark brown, moist					
10	SAND, some gravel, little to few clay, trace silt, brown, moist	MS (90%)				10
	SAND, fine to medium, trace silt, light brown, moist					
15	SAND, fine to medium, trace silt, gray to dark gray, wet	KS (90%) KS (90%)				
	End of boring = 18 feet.					
20						20
25						25
30						30
35						35






Drilling Contractor: <b>Environmental Investigations</b>	Driller: <b>Bill</b>	Drilling Method: <b>Geo Probe</b>	Date Drilled: <b>1/27/2006</b>
Logged By: <b>LCM</b>	Logging Method: <b>ASTM D 2488-90</b>	Development Method: <b>Peristaltic Pump</b>	Project #: <b>02 061</b>
Casing Type: <b>1" Pvc</b>	Screen Type & Length: <b>1" - 5' / 10 Slot</b>	Ground Elevation: <b>NA</b>	Top of Casing Elevation: <b>NA</b>
			Sheet Number: <b>1 of 1</b>



 <b>INLAND SEAS ENGINEERING</b> Traverse City 231-933-4041 Flushing 810-487-0555		<b>SB-303</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690			
		LOCATION: 10190 Munro Road Whitewater Township Grand Traverse County, Michigan					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH	
	<b>GRADE</b> Grass <small>SAND, fine to medium, trace silt, trace organics, dark brown, moist</small>						
	SAND, fine to medium, trace coarse sand, light brown, dry to moist	85%	MS				
5	SAND, fine to medium, trace gravel, trace silt, trace clay, red-brown, dry to moist. Clay & silt enriched in thin crossbeds (<.25")	95%	MS			5	
10	SAND, fine to medium, trace gravel, trace coarse sand, trace silt, trace clay, light brown, moist	95%	MS			10	
▽	SAND, fine to medium, trace gravel, trace coarse sand, trace silt, dark gray, moist to wet						
	END OF BORING = 13.0 Feet Below Grade						
15						15	
20						20	
25						25	
30						30	
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Environmental Investigations		REX		Geoprobe		1/27/2006	
Logged By:		Logging Method:		Project #:		Sheet Number:	
LCM		ASTM D 2488		02061-59E		1 of 1	


 <p><b>INLAND SEAS ENGINEERING</b></p> <p>Traverse City 231-933-4041 Flushing 810-487-0555</p>		<p align="center"><b>SB-304</b></p>		<p>PREPARED FOR:</p>					
		<p>LOCATION:</p> <p align="center"><b>10190 Munro Road Whitewater Township Grand Traverse County, Michigan</b></p>		<p align="center"><b>Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690</b></p>					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		POCKET PEN (TSF)	DEPTH		
	<b>GRADE</b> Grass								
	SAND, little gravel, few clay, few organics, trace silt, dark brown to black, moist								
	SAND, fine to medium, few to trace silt, few to trace clay, trace gravel to cobble, trace coarse sand, dark brown, moist	70%	MS						
5	SAND, fine to medium, little to few gravel to cobbles, few to trace silt, few to trace clay, trace coarse sand, dark brown, moist	90%	MS				5		
10	SAND, fine to medium, trace coarse sand, brown to gray, moist	90%	MS				10		
15	SAND, fine to medium, few coarse sand, trace gravel, trace silt, trace clay, brown, moist to wet	80%	KS				15		
	CLAY, some fine sand, few silt, trace coarse to medium sand, gray, moist to wet								
	END OF BORING = 15.0 Feet Below Grade								
20							20		
25							25		
30							30		
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:			
Environmental Investigations		REX		Geoprobe		1/27/2006			
Logged By:		Logging Method:		Project #:		Sheet Number:			
LCM		ASTM D 2488		02061-59E		1 of 1			

 <p>Traverse City 231-933-4041 Flushing 810-487-0555</p>		<b>SB-305</b>		<b>PREPARED FOR:</b>  <b>Cherry Blossom LLC</b> <b>10190 Munro Road</b> <b>Williamsburg, Michigan 49690</b>			
		<b>LOCATION:</b>  <b>10190 Munro Road</b> <b>Whitewater Township</b> <b>Grand Traverse County, Michigan</b>					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH	
	<b>GRADE</b> <b>Grass</b> SAND, little clay, few organics, few silt, gray to dark brown to black to red, moist to wet						
	SAND, fine to medium, few to trace silt, brown to dark brown, moist. Silt enriched in thin, dark brown crossbeds (<.5")	95%	MS			5	
5	SAND, fine to medium, few clay, trace coarse sand, trace silt, brown to dark brown, moist	95%	MS				
	SAND, fine to medium, trace silt, light brown to black, dry to moist Black lenses contain magnetite, crossbedded (<.25" thick)					10	
10	SAND, fine to medium, few silt, trace clay, grayish brown, moist to wet	75%	MS				
	SAND, fine to medium, trace fine gravel, trace coarse sand, trace silt, trace clay, dark gray, wet	60%	KS SP KS			15	
15		75%	KS				
		95%	KS			20	
20	END OF BORING = 20.0 Feet Below Grade						
25						25	
30						30	
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Environmental Investigations		REX		Geoprobe		1/27/2006	
Logged By:		Logging Method:		Project #:		Sheet Number:	
LCM		ASTM D 2488		02061-59E		1 of 1	


 <p><b>INLAND SEAS ENGINEERING</b></p> <p>Traverse City 231-933-4041 Flushing 810-487-0555</p>		<p align="center"><b>SB-306</b></p>		<p align="center"><b>PREPARED FOR:</b></p> <p align="center"><b>Cherry Blossom LLC</b>  <b>10190 Munro Road</b>  <b>Williamsburg, Michigan 49690</b></p>			
		<p><b>LOCATION:</b></p> <p align="center"><b>10190 Munro Road</b>  <b>Whitewater Township</b>  <b>Grand Traverse County, Michigan</b></p>					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		POCKET PEN (TSF)	DEPTH
	GRADE Grass						
	SAND, fine to medium, some clay, few silt, few organics, trace gravel, gray to dark brown, moist					0.25	
	CLAY, some fine sand, few silt, trace coarse sand, gray, soft, moist						
	SAND, little gravel, few clay, trace silt, brown, moist. Layered	95%	MS				
5	SAND, fine to medium, trace coarse sand, tan to red-brown, dry to moist	75%	MS				5
	CLAY, little fine sand, few silt, trace gravel, trace coarse sand, dark brown, hard to very stiff, moist	75%	MS			4.5 3.5 2.25	
10	SAND, fine to medium, few silt, few clay, trace coarse sand, brown to dark brown, moist						10
	END OF BORING = 10.0 Feet Below Grade						
	Drilled directly adjacent to SB-130						
15							15
20							20
25							25
30							30
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Environmental Investigations		REX		Geoprobe		1/27/2006	
Logged By:		Logging Method:		Project #:		Sheet Number:	
LCM		ASTM D 2488		02061-59E		1 of 1	


 <p><b>INLAND SEAS ENGINEERING</b></p> <p>Traverse City 231-933-4041 Flushing 810-487-0555</p>		<p align="center"><b>SB-307</b></p>		<p><b>PREPARED FOR:</b></p> <p align="center"><b>Cherry Blossom LLC</b>  <b>10190 Munro Road</b>  <b>Williamsburg, Michigan 49690</b></p>			
		<p><b>LOCATION:</b></p> <p align="center"><b>10190 Munro Road</b>  <b>Whitewater Township</b>  <b>Grand Traverse County, Michigan</b></p>					
<b>DEPTH</b>	<b>SOIL DESCRIPTION AND COMMENTS</b>	<b>PERCENT RECOVERY</b>	<b>SAMPLE METHOD</b>	<b>TYPE &amp; INTERVAL</b>		<b>POCKET PEN (TSF)</b>	<b>DEPTH</b>
	<b>GRADE</b> <b>Grass</b>						
	CLAY, little silt, few organics, trace gravel, trace sand, black to dark gray, firm to stiff, moist	95%	MS			0.6-2.25	
	SAND, fine to medium, trace coarse sand, trace clay, dark gray, moist						
	ORGANIC SILT, little clay, few fine sand, black, moist						
	CLAY, some fine sand, little silt, trace coarse sand, light gray, very stiff to firm, moist					3.0-0.7	
5	SAND, fine to medium, few coarse sand, few to trace clay, trace silt, trace organics, light gray to dark gray, moist to wet	95%	MS				5
	CLAY, little silt, few fine sand, few organics, trace medium sand, gray to dark brown, very soft, moist						
	SAND, fine to medium, some to little clay, few gravel, trace silt, dark gray, moist						
	SAND, fine to medium, few coarse sand, trace silt, light brown, moist to wet					<0.25	
10	END OF BORING = 8.0 Feet Below Grade						10
15							15
20							20
25							25
30							30
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Environmental Investigations		REX		Geoprobe		1/26/2006	
Logged By:		Logging Method:		Project #:		Sheet Number:	
LCM		ASTM D 2488		02061-59E		1 of 1	


 <b>INLAND SEAS ENGINEERING</b> Traverse City 231-933-4041 Flushing 810-487-0555		<b>SB-308</b>		<b>PREPARED FOR:</b>  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690					
		<b>LOCATION:</b> 10190 Munro Road Whitewater Township Grand Traverse County, Michigan							
DEPTH	SOIL DESCRIPTION AND COMMENTS			PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		POCKET PEN (TSF)	DEPTH
	<b>GRADE</b> Grass CLAY, some fine to medium sand, few gravel, few silt, few organics, dark gray to brown, very soft moist								
▽	SAND, fine to medium, little to few gravel, trace coarse sand, trace silt, trace clay, brown to dark gray, moist to wet			90%	MS			<0.25	
5	CLAY, little fine sand, few silt, grayish brown, moist END OF BORING = 4.0 Feet Below Grade								5
10									10
15									15
20									20
25									25
30									30
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:			
Environmental Investigations		REX		Geoprobe		1/26/2006			
Logged By:		Logging Method:		Project #:		Sheet Number:			
LCM		ASTM D 2488		02061-59E		1 of 1			


 <p><b>INLAND SEAS ENGINEERING</b></p> <p>Traverse City 231-933-4041 Flushing 810-487-0555</p>		<p align="center"><b>SB-309</b></p> <p>LOCATION:</p> <p align="center"><b>10190 Munro Road Whitewater Township Grand Traverse County, Michigan</b></p>		<p>PREPARED FOR:</p> <p align="center"><b>Cherry Blossom LLC 10190 Munro Road Williamsburg, Michigan 49690</b></p>					
DEPTH	SOIL DESCRIPTION AND COMMENTS			PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		POCKET PEN (TSF)	DEPTH
	GRADE Grass								
	CLAY, some fine sand, few silt, few organics, trace gravel, trace coarse sand, dark brown, firm, moist			90%	MS			0.75	
	SAND, fine to medium, trace gravel, trace silt, trace clay, brown, moist								
	CLAY, some sand few silt, brown, soft, moist								
	SAND, fine to medium, trace gravel, trace silt, trace clay, brown, moist			90%	MS			0.4 0.75	
5	CLAY, some to little fine-med sand, few silt, trace coarse sand, brown to tan, soft to firm, moist. Coarsens down.								
	SAND, some to little gravel, trace silt, trace clay, dark gray to brown, moist to wet								
	END OF BORING = 8.0 Feet Below Grade								
10									10
15									15
20									20
25									25
30									30
Drilling Contractor:		Driller:		Drilling Method:			Date Drilled:		
Environmental Investigations		REX		Geoprobe			1/26/2006		
Logged By:		Logging Method:		Project #:			Sheet Number:		
LCM		ASTM D 2488		02061-59E			1 of 1		



 <p><b>INLAND SEAS ENGINEERING</b></p> <p>Traverse City 231-933-4041 Flushing 810-487-0555</p>		<p align="center"><b>SB-130</b></p>		<p>PREPARED FOR:</p> <p align="center"><b>Cherry Blossom LLC</b>  <b>10190 Munro Road</b>  <b>Williamsburg, Michigan 49690</b></p>			
		<p>LOCATION:</p> <p align="center"><b>10190 Munro Road</b>  <b>Whitewater Township</b>  <b>Grand Traverse County, Michigan</b></p>					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	POCKET PEN (TSF)	DEPTH	
	<p><b>GRADE</b>      <b>Grass</b></p> <p>SAND, fine to medium, some clay, few silt, few organics, trace gravel, gray to dark brown, moist</p> <p>CLAY, some fine sand, few silt, trace coarse sand, gray, soft moist</p> <p>SAND, little gravel, few clay, trace silt, brown, moist. Layered</p>						
5	<p>SAND, fine to medium, trace coarse sand, tan to red-brown, moist to wet Wet at clay interface but not able to produce water for sampling</p>	100%	HA			5	
10	<p>CLAY, little fine sand, few silt, trace gravel, trace coarse sand, dark brown, hard to very stiff, moist</p> <p>SAND, fine to medium, few silt, few clay, trace coarse sand, brown to dark brown, moist</p> <p>SILT, few clay, trace fine sand, greenish gray, moist</p> <p>SAND, little clay, trace silt, gray to dark brown, moist</p> <p>CLAY, some sand and gravel, trace silt, dark brown, moist</p>					10	
15	<p>END OF BORING = 13.0 Feet Below Grade - Hand Auger Refusal</p>					15	
20						20	
25						25	
30						30	
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Inland Seas Engineering		TJG/LCM		Hand Auger		12/5/2006	
Logged By:		Logging Method:		Project #:		Sheet Number:	
LCM		ASTM D 2488		02061-59E		1 of 1	

 <p><b>INLAND SEAS ENGINEERING</b></p> <p>Traverse City 231.933.4041 Flushing 810.487.0555</p>		<b>SOIL BORING:</b>  <b>SB-101</b>		<b>PREPARED FOR:</b>  <b>Cherry Blossom LLC</b> <b>10190 Munro Road</b> <b>Williamsburg, Michigan 49690</b>				
		<b>LOCATION:</b> <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>						
<b>DEPTH</b>	<b>SOIL DESCRIPTION AND COMMENTS</b>	<b>SAMPLE METHOD</b>	<b>HAND PENETROMETER (TSF)</b>	<b>TYPE &amp; INTERVAL</b>		<b>BLOW COUNT</b>	<b>PID READING (ppm)</b>	<b>DEPTH</b>
	<b>GRADE</b> Grass							
	ORGANIC SILT, little fine sand, few clay, black, moist	HA						
1	End of boring = 1.0 Feet below grade							1
2								2
3								3
4								4
5								5
6								6
7								7
<b>Drilling Contractor:</b> <b>Inland Seas Engineering</b>		<b>Driller:</b> <b>B. Egan</b>		<b>Drilling Method:</b> <b>Hand Auger</b>		<b>Date Drilled:</b> <b>11/23/05</b>		
<b>Logged By:</b> <b>B. Egan</b>		<b>Logging Method:</b> <b>ASTM-D 2488-00</b>		<b>Project #:</b> <b>02061-59E</b>		<b>Sheet Number:</b> <b>1 of 1</b>		

 Traverse City 231.933.4041 Flushing 810.487.0555		SOIL BORING: <b>SB-102</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> <b>10190 Munro Road</b> <b>Williamsburg, Michigan 49690</b>				
		LOCATION: <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>						
DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL		BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass							
1	ORGANIC SILT, little fine sand, few clay, black, moist End of boring = 1.0 Feet below grade	HA						1
2								2
3								3
4								4
5								5
6								6
7								7
Drilling Contractor: <b>Inland Seas Engineering</b>		Driller: <b>B. Egan</b>		Drilling Method: <b>Hand Auger</b>		Date Drilled: <b>11/23/05</b>		
Logged By: <b>B. Egan</b>		Logging Method: <b>ASTM-D 2488-00</b>		Project #: <b>02061-59E</b>		Sheet Number: <b>1 of 1</b>		

 Traverse City 231.933.4041 Flushing 810.487.0555		SOIL BORING: <b>SB-103</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690			
		LOCATION: SW of Intersection-Angell and Munro Roads Parcel #13-117-002-00 Whitewater Township, Grand Traverse County					
DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass						
	SAND, few clay, few organics, trace silt, brown, moist						
1	ORGANIC SILT, few fine sand, few clay, black, moist	HA					1
	End of boring = 1.0 Feet below grade						
2							2
3							3
4							4
5							5
6							6
7							7
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Inland Seas Engineering		B. Egan		Hand Auger		11/23/05	
Logged By:		Logging Method:		Project #:		Sheet Number:	
B. Egan		ASTM-D 2488-00		02061-59E		1 of 1	



Traverse City 231.933.4041  
Flushing 810.487.0555

**SOIL BORING:**

**SB-104**

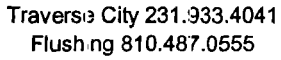
**LOCATION:**

**SW of Intersection-Angell and Munro Roads  
Parcel #13-117-002-00  
Whitewater Township,  
Grand Traverse County**

**PREPARED FOR:**

**Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690**

DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass						
1	SAND, medium, trace silt, trace organics, brown, moist	HA					1
	End of boring = 1.0 Feet below grade						
2							2
3							3
4							4
5							5
6							6
7							7
Drilling Contractor: <b>Inland Seas Engineering</b>		Driller: <b>B. Egan</b>		Drilling Method: <b>Hand Auger</b>		Date Drilled: <b>11/23/05</b>	
Logged By: <b>B. Egan</b>		Logging Method: <b>ASTM-D 2488-00</b>		Project #: <b>02061-59E</b>		Sheet Number: <b>1 of 1</b>	

**SB-105**

**SW of Intersection-Angell and Munro Roads  
Parcel #13-117-002-00  
Whitewater Township,  
Grand Traverse County**

**Cherry Blossom LLC**  
**10190 Munro Road**  
**Williamsburg, Michigan 49690**

DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
0	GRADE Grass						0
1	ORGANIC SILT, little fine sand, few clay, black, moist	HA					1
1	End of boring = 1.0 Feet below grade						1
2							2
3							3
4							4
5							5
6							6
7							7

Drilling Contractor:	Driller:	Drilling Method:	Date Drilled:
Inland Seas Engineering	B. Egan	Hand Auger	11/23/05
Logged By:	Logging Method:	Project #:	Sheet Number:
B. Egan	ASTM-D 2488-00	02061-59E	1 of 1



Traverse City 231.933.4041  
Flushing 810.487.0555

**SOIL BORING:****SB-106****LOCATION:**

**SW of Intersection-Angell and Munro Roads  
Parcel #13-117-002-00  
Whitewater Township,  
Grand Traverse County**

**PREPARED FOR:**

**Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690**

DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass						
	SAND, few clay, few organics, trace silt, brown, moist						
	ORGANIC SILT, few fine sand, few clay, black, moist	HA					
1	End of boring = 1.0 Feet below grade						1
2							2
3							3
4							4
5							5
6							6
7							7

Drilling Contractor: <b>Inland Seas Engineering</b>	Driller: <b>B. Egan</b>	Drilling Method: <b>Hand Auger</b>	Date Drilled: <b>11/23/05</b>
Logged By: <b>E. Egan</b>	Logging Method: <b>ASTM-D 2488-00</b>	Project #: <b>02061-59E</b>	Sheet Number: <b>1 of 1</b>



**INLAND SEAS  
ENGINEERING**

Traverse City 231.933.4041  
Flushing 810.487.0555

SOIL BORING:

**SB-107**

LOCATION:


**SW of Intersection-Angell and Munro Roads  
Parcel #13-117-002-00  
Whitewater Township,  
Grand Traverse County**


PREPARED FOR:

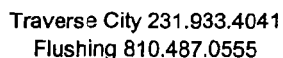
**Cherry Blossom LLC  
10190 Munro Road  
Williamsburg, Michigan 49690**

DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass						
	SAND, few clay, trace organics, trace silt, brown, moist						
	ORGANIC SILT, few fine sand, few clay, black, moist	HA					
1	End of boring = 1.0 Feet below grade						1
2							2
3							3
4							4
5							5
6							6
7							7
Drilling Contractor:		Driller:	Drilling Method:		Date Drilled:		
Inland Seas Engineering		B. Egan	Hand Auger		11/23/05		
Logged By:		Logging Method:	Project #:		Sheet Number:		
E. Egan		ASTM-D 2488-00	02061-59E		1 of 1		



 Traverse City 231.933.4041 Flushing 810.487.0555		SOIL BORING: <b>SB-108</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> <b>10190 Munro Road</b> <b>Williamsburg, Michigan 49690</b>				
		LOCATION: <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>						
DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL		BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass							
	SAND, few clay, few organics, trace silt, brown, moist	HA						
1	ORGANIC SILT, little clay, few fine sand, black, moist							1
	End of boring = 1.0 Feet below grade							
2								2
3								3
4								4
5								5
6								6
7								7
Drilling Contractor:		Driller:	Drilling Method:		Date Drilled:			
Inland Seas Engineering		B. Egan	Hand Auger		11/23/05			
Logged By:		Logging Method:	Project #:		Sheet Number:			
B. Egan		ASTM-D 2488-00	02061-59E		1 of 1			

 Traverse City 231.933.4041 Flushing 810.487.0555		SOIL BORING: <b>SB-109</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> <b>10190 Munro Road</b> <b>Williamsburg, Michigan 49690</b>				
		LOCATION: <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>						
DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL		BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass							
	SAND, few clay, few organics, trace silt, brown, moist	HA						
1	ORGANIC SILT, little clay, few fine sand, black, moist							1
	End of boring = 1.0 Feet below grade							
2								2
3								3
4								4
5								5
6								6
7								7
Drilling Cont actor: <b>Inland Seas Engineering</b>		Driller: <b>B. Egan</b>		Drilling Method: <b>Hand Auger</b>		Date Drilled: <b>11/23/05</b>		
Logged By: <b>B. Egan</b>		Logging Method: <b>ASTM-D 2488-00</b>		Project #: <b>02061-59E</b>		Sheet Number: <b>1 of 1</b>		

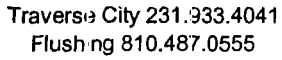


**SB-122**

**SW of Intersection-Angell and Munro Roads  
Parcel #13-117-002-00  
Whitewater Township,  
Grand Traverse County**

**Cherry Blossom LLC**  
**10190 Munro Road**  
**Williamsburg, Michigan 49690**

### Soil Borings






**SB-123**


**SW of Intersection-Angell and Munro Roads  
Parcel #13-117-002-00  
Whitewater Township,  
Grand Traverse County**

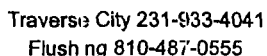
**Cherry Blossom LLC**  
**10190 Munro Road**  
**Williamsburg, Michigan 49690**

### Soil Borings

 Traverse City 231.933.4041 Flushing 810.487.0555		SOIL BORING: <b>SB-124</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690				
LOCATION: <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>								
DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL		BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass							
	SAND, few clay, few organics, trace silt, brown, moist	HA						
1	ORGANIC SILT, little clay, little fine sand, black, moist							1
2	SAND, fine to medium, few clay, trace silt, brown, wet							2
	End of boring = 2.0 Feet below grade							
3								3
4								4
5								5
6								6
7								7
Drilling Contractor: <b>Inland Seas Engineering</b>		Driller: <b>L. Mankowski</b>		Drilling Method: <b>Hand Auger</b>		Date Drilled: <b>12/5/05</b>		
Logged By: <b>L. Mankowski</b>		Logging Method: <b>ASTM-D 2488-00</b>		Project #: <b>02061-59E</b>		Sheet Number: <b>1 of 1</b>		

 <b>INLAND SEAS ENGINEERING</b> Traverse City 231.933.4041 Flushing 810.487.0555		<b>SOIL BORING:</b> <b>SB-125</b>		<b>PREPARED FOR:</b>  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690			
		<b>LOCATION:</b> <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>					
DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL	BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass						
	SAND, little organics, few clay, trace silt, brown, moist	HA					
1	ORGANIC SILT, little clay, few fine sand, black, moist						1
2	SAND, few silt, few clay, brown, moist to wet						2
	End of boring = 2.5 Feet below grade						
3							3
4							4
5							5
6							6
7							7
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:	
Inland Seas Engineering		L. Mankowski		Hand Auger		12/5/05	
Logged By:		Logging Method:		Project #:		Sheet Number:	
L. Mankowski		ASTM-D 2488-00		02061-59E		1 of 1	

 <b>INLAND SEAS ENGINEERING</b> Traverse City 231.933.4041 Flushing 810.487.0555		SOIL BORING: <b>SB-126</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690				
		LOCATION: <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>						
DEPTH	SOIL DESCRIPTION AND COMMENTS	SAMPLE METHOD	HAND PENETROMETER (TSF)	TYPE & INTERVAL		BLOW COUNT	PID READING (ppm)	DEPTH
	GRADE Grass							
	SAND, little organics, trace silt, trace clay, brown, moist	HA						
1	ORGANIC SILT, littlefine sand, few clay, black, moist							1
2	SAND, few silt, few clay, trace gravel, brown, moist to wet							2
	End of boring = 2.25 Feet below grade							
3								3
4								4
5								5
6								6
7								7
Drilling Contractor:		Driller:		Drilling Method:		Date Drilled:		
Inland Seas Engineering		L. Mankowski		Hand Auger		12/5/05		
Logged By:		Logging Method:		Project #:		Sheet Number:		
L. Mankowski		ASTM-D 2488-00		02061-59E		1 of 1		



TMW-1

LOCATION:



**SW of Intersection-Angell and Munro Roads  
Parcel #13-117-002-00  
Whitewater Township,  
Grand Traverse County**




**PREPARED FOR:**

**Cherry Blossom LLC**  
**10190 Munro Road**  
**Williamsburg, Michigan 49690**

DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	BLOW COUNT	WELL DIAGRAM	DEPTH
1	GRADE: Grass						1
2	SAND, few clay, few organics, trace silt, brown, moist						2
3	ORGANIC SILT, little clay, little fine sand, black, moist		HA				3
4	SAND, fine to medium, few clay, trace silt, brown, wet						4
5	CLAY, trace silt, gray, moist						5
6	End of boring = 4.0 Feet below grade						6
7							7
Drilling Contractor: Inland Seas Engineering		Driller: T. Gates		Drilling Method: Hand Auger		Date Drilled: 12/5/05	
Logged By: T. Gates		Logging Method: ASTM-D 2488-00		Development Method: Peristaltic Pump		Project #: 02061-59E	
Casing Type: 1" PVC		Screen Type and Length: 1" PVC 10 Slot / 5'		Ground Elevation: NM		Top of Casing Elevation: 3.7 Feet Above Grade	
						Sheet Number: 1 of 1	



 <b>INLAND SEAS ENGINEERING</b> Traverse City 231-933-4041 Flushing 810-487-0555		MONITOR WELL: <b>TMW-2</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690				
		LOCATION: <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>						
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL		BLOW COUNT	WELL DIAGRAM	DEPTH
1	<b>GRADE</b> Grass <b>SAND</b> , few clay, few organics, trace silt, brown, moist		HA					1
2	<b>ORGANIC SILT</b> , little clay, few fine sand, black, moist							2
3	<b>SAND</b> , fine, trace silt, trace clay, brown, wet							3
4	<b>SAND</b> , fine to medium, trace silt, reddish orange, wet							4
5	<b>End of boring = 5.0 Feet below grade</b>						5	
6							6	
7							7	
Drilling Contractor: <b>Inland Seas Engineering</b>		Driller: <b>T. Gates</b>		Drilling Method: <b>Hand Auger</b>		Date Drilled: <b>12/5/05</b>		
Logged By: <b>T. Gates</b>		Logging Method: <b>ASTM-D 2488-00</b>		Development Method: <b>Peristaltic Pump</b>		Project #: <b>02061-59E</b>		
Casing Type: <b>1" PVC</b>		Screen Type and Length: <b>1" PVC 10 Slot / 5'</b>		Ground Elevation: <b>NM</b>		Top of Casing Elevation: <b>3.6 Feet Above Grade</b>		Sheet Number: <b>1 of 1</b>

 <b>INLAND SEAS ENGINEERING</b> Traverse City 231-933-4041 Flushing 810-487-0555		MONITOR WELL: <b>TMW-3</b>		PREPARED FOR:  <b>Cherry Blossom LLC</b> 10190 Munro Road Williamsburg, Michigan 49690			
		LOCATION: <b>SW of Intersection-Angell and Munro Roads</b> <b>Parcel #13-117-002-00</b> <b>Whitewater Township,</b> <b>Grand Traverse County</b>					
DEPTH	SOIL DESCRIPTION AND COMMENTS	PERCENT RECOVERY	SAMPLE METHOD	TYPE & INTERVAL	BLOW COUNT	WELL DIAGRAM	DEPTH
	GRADE Grass						
	SAND, few clay, few organics, trace silt, brown, moist		HA				
1	ORGANIC SILT, little fine sand, little to few clay, black, moist						1
2	SAND, fine to medium, few clay, trace silt, brown, wet						2
3							3
4	CLAY, trace silt, gray						4
	End of boring = 4.0 Feet below grade - REFUSAL Point would not be driven more deeply						
5							5
6							6
7							7
Drilling Contractor: <b>Inland Seas Engineering</b>		Driller: <b>LCM</b>		Drilling Method: <b>Hand Auger</b>		Date Drilled: <b>12/16/2006</b>	
Logged By: <b>LCM</b>		Logging Method: <b>ASTM-D 2488-00</b>		Development Method: <b>Peristaltic Pump</b>		Project #: <b>02061-59E</b>	
Casing Type: <b>1" PVC</b>		Screen Type and Length: <b>1" PVC 10 Slot / 5'</b>		Ground Elevation: Top of Casing Elevation: <b>NM NM</b>		Sheet Number: <b>1 of 1</b>	

**WESTON TRANSMITTAL FORM**

**TO:** U.S. EPA Region 5  
Emergency Response Branch  
801 Garfield Avenue, #229  
Traverse City, MI 49686

Date:	03/08/06	Job No.:	12634.001.002.0574
Attn.:	Mr. Ralph Dollhopf, OSC		
Re:	WRS Site, Williamsburg, MI		
File No:	2.1		

**WE ARE SENDING YOU:**

<input checked="checked" type="checkbox"/> Attached	<input type="checkbox"/> Under Separate Cover
---	---

<input type="checkbox"/> Prints	<input type="checkbox"/> Plans	<input type="checkbox"/> Samples
<input type="checkbox"/> Specifications	<input type="checkbox"/> Copy of Letter	<input type="checkbox"/> Change Order
<input type="checkbox"/> Shop Drawings	<input type="checkbox"/> Reports	

Copies	Date	No.	Description
1	03/06/06		Inland Waters Letter Report dated 3/06/06

**WE ARE TRANSMITTING as checked below:**

<input type="checkbox"/> For Approval	<input checked="checked" type="checkbox"/> For Your Use	_____ Copies for Approval
<input type="checkbox"/> As Requested	<input type="checkbox"/> Returned After Loan to Us	_____ Copies for Distribution
<input type="checkbox"/> For Review and Comment	<input type="checkbox"/> Other (explain)	_____ Corrected Prints

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
Weston Solution of Michigan, Inc.

**REMARKS:****COPY TO:****WHEN RETURNING check below, as appropriate:**

<input type="checkbox"/> Approved	<input type="checkbox"/> Rejected	_____ Copies for Approval
<input type="checkbox"/> Approved as Corrected	<input type="checkbox"/> Submit	_____ Copies for Distribution
<input type="checkbox"/> Revise and Resubmit	<input type="checkbox"/> Other (explain)	_____ Corrected Prints

**REMARKS:**

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

